

REMARKS

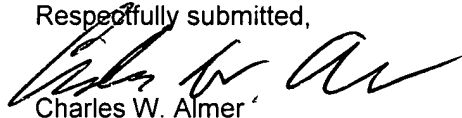
Claims 1 and 3 - 39 are pending in this application. Claims 33 - 39 have been withdrawn from consideration and claims 2 and 23 have been cancelled.

Claim 1 was rejected as unpatentable under 35 U.S.C. 103(a) by U.S. Patent No. 6,194,788, issued to Gilleo and Japanese Publication 58103525, published by Kunitomo. Gilleo discloses a flip chip having solder bumps and integrated flux and underfill. Kunitomo discloses an epoxy resin composition containing a curing catalyst comprising a 2-methylimidazole/pyromellitic anhydride complex. One skilled in the art would not be led to combine Gilleo and Kunitomo to arrive at the composition of the present invention. The reason for this is that one skilled in the art would not combine such a complex, let alone an adduct, with a composition containing a fluxing agent because the addition of the fluxing agent would drastically alter the curing rate of the composition. Thus, it is surprising that the present invention provides an encapsulant that is B-stageable having the combination of the adduct and a fluxing agent. As one skilled in the art would clearly not be led to the present invention via a combination of Gilleo and Kunitomo, it is respectfully submitted that claim 1 is patentable under 35 U.S.C. 103(a) over Gilleo in view of Kunitomo.

Claims 3 - 31 were rejected as unpatentable under 35 U.S.C. 103(a) over Gilleo in view of Kunitomo and further in view of JP 62-081416A, issued to Kobayashi. It is respectfully submitted that one skilled in the art would not be led to the use of an imidazole-anhydride adduct via the combination of Gilleo, Kunitomo and Kobayashi. The use of an anhydride as a curing agent is not conventionally known in the art of B-stageable underfill encapsulants. While Kunitomo discloses the use of a potential anhydride complex, one skilled in the art would not have expected that complex to work in conjunction with a fluxing agent, as set forth above. Thus, one skilled in the art would not have been led to the combination of Gilleo, Kunitomo and Kobayashi. Accordingly, it is respectfully submitted that one skilled in the art would not be led to the present invention via Gilleo in view of Kunitomo and further in view of Kobayashi, thus it is respectfully submitted that claims 3 - 31 are patentable under 35 U.S.C. 103(a) over Gilleo in view of Kunitomo and further in view of Kobayashi.

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance. If there are any issues that the Examiner wishes to discuss, he is invited to contact the undersigned attorney at the telephone number set forth below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Charles W. Almer', is written over the typed name.

Charles W. Almer

Reg. No. 36,731

Tel. No. 908 707-3738

National Starch and Chemical Company
10 Funderne Avenue
Bridgewater, NJ 08807
February 26, 2004